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| 09/587,092      | 05/31/2000  | Steven R. Hoffman    | VISAP026            | 6899             |

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| EXAMINER |
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KANOF, PEDRO R

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| ART UNIT | PAPER NUMBER |
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3628

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/587,092

Applicant(s)

HOFFMAN ET AL.

Examiner

Pedro R. Kanof

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been reviewed. Claims 1-15 are pending and Applicant has canceled Please cancel claims 16-18.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4-7 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al. (U.S. Patent No. 5,887,266) in view of Baker et al (Hereinafter Baker – US 5,884,292).**

Claim 1: Heinonen discloses a smart card loading system for loading value over a telecommunications network onto a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42), the smart card loading system comprising: a mobile telephone handset in communication with said telecommunications network, the handset including a subscriber identification module, a card reader for communicating with a smart card, which is separate from the subscriber identification module of the mobile telephone handset (Col. 1, line 57-col. 2, line 14), a gateway computer arranged to receive said request message from said handset over said telecommunications network and to retransmit said request message (Col. 1, lines 42-45 and col. 3, lines 61-64), a funds

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issuer computer arranged to receive the request message and to debit a consumer account associated with the smart card (Col. 3, lines 31-36 and 44-56), an authentication computer arranged to receive said request message (sends and receive info.... Col. 10, lines 27-37 and 61-65) and to authenticate said smart card, whereby said smart card may be authorized to load (Col. 1, lines 49-56) the value (Col. 8, lines 36-40 and 52-64, and col. 1, lines 53-57). However, Heinonen does not explicitly disclose arranged to be inserted in said handset, and an input interface for indicating a value to be loaded onto said smart card, said handset being arranged to generate a request message to load the value onto the smart card. Baker discloses arranged to be inserted in said handset, and an input interface for indicating a value to be loaded onto said smart card, said handset being arranged to generate a request message to load the value onto the smart card [abs; Fig. 1; C1 L5-L37; C2 L62-67; C3 L22-L45; C4 L15-20]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include that step in the Heinonen's system. One would have been motivated to use such steps in order to keep the Smart card value updated to avoid rejection of services or purchasing.

Claim 4: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42). However, Heinonen does not explicitly disclose smart card loading system as recited in claim 1 wherein said authentication computer authenticates said smart card using a first cryptographic signature and generates a second cryptographic signature to authenticate a load response, whereby said transaction is secured. Baker discloses

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smart card loading system [abs; Fig. 1; C1 L5 to C2 L23; C2 L62-67; C3 L22-L45; C4 L15-20] and wherein said authentication computer authenticates said smart card using a first cryptographic signature and generates a second cryptographic signature to authenticate a load response, whereby said transaction is secured [C6 L11-L59; C8 L33-L46]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to authenticate the smart card using a first cryptographic signature and generates a second cryptographic signature to authenticate a load response. One would have been motivated to use such steps in order to increase the system security.

Claim 5: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) loading system for loading value over a telecommunications network onto a smart card, said smart card loading system comprising: a mobile telephone handset in communication with said telecommunications network, said handset including a subscriber identification module, a card reader for communicating with a smart card, which is separate from the subscriber identification module of the mobile telephone handset (Col. 1, line 57-col. 2, line 14), arranged to generate a funds request message which includes an authorization request certificate (Col. 1, lines 10-25 and col. 2, lines 50-55); a gateway computer arranged to receive said funds request message from said handset over said telecommunications network and to retransmit said funds request message (Col. 1, lines 42-45 and col. 3, lines 61-64), a funds issuer computer arranged to receive said funds request message, to authenticate said smart card using said

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authorization request certificate (Col. 3, lines 31-36 and 44-56), and to generate an authentication response certificate for delivery to the smart card, whereby the smart card may validate the authorization request certificate and load (Col. 1, lines 49-56) the value (Col. 8, lines 36-40 and 52-64, and col. 1, lines 53-57), wherein the smart card is able to be remove from the handset (C4 L59-67; Col. 1, line 57-col. 2, line 14) to interface with a point-of-sale terminal through a contact interface with the point-of-sale terminal (Col. 10, lines 17-27). However, Heinonen does not explicitly disclose loading system for loading value and smart card loading system. Baker discloses loading system for loading value and smart card loading system [abs; Fig. 1; C1 L5 to C2 L23; C2 L62-67; C3 L22-L45; C4 L15-20]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include that step in the Heinonen's system. One would have been motivated to use such steps in order to keep the Smart card value updated to avoid rejection of services or purchasing.

Claim 6: Heinonen discloses a smart card loading system as recited in claim 5 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 7: Heinonen discloses a smart card loading system as recited in claim 6 wherein said funds request message is integrated with the Short Message Service (SMS) channel of the telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 9: Heinonen discloses a method of loading value over a telecommunications network onto a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) and transacting a purchase with the smart card (Col. 10, lines 17-39), the method comprising: receiving at a mobile telephone handset a request from a user to load a value onto the smart card inserted in said handset; generating a funds request message which includes said value; sending said funds request message over said telecommunications network to a funds issuer computer arranged to debit an account associated with said user; generating a load request message (Col. 1, lines 10-25 and col. 2, lines 50-55); sending said load request message over said telecommunications network to an authentication computer arranged to authenticate said smart card (Col. 1, lines 49-56); approval to load, loading said value onto said smart card (Col. 1, lines 49-56); removing the smart card from the handset (C4 L59-67; Col. 1, line 57-col. 2, line 14); and using the point-of-sale terminal to debit the smart card to perform a purchase ((Col. 10, lines 28-38). Heinonen does not explicitly disclose including a first cryptographic signature, receiving a response message which includes a second cryptographic signature; and validating the second cryptographic signature, and placing the smart card in contact with a point-of-sale terminal to provide a contact interface with the point-of-sale terminal. Baker discloses smart card loading system [abs; Fig. 1; C1 L5 to C2 L23; C2 L62-67; C3 L22-L45; C4 L15-20] and including a first cryptographic signature, receiving a response message which includes a second cryptographic signature; and validating the second cryptographic signature [C6 L11-L59; C8 L33-L46]

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and placing the smart card in contact with a point-of-sale terminal to provide a contact interface with the point-of-sale terminal [C1 L36-L45]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include those steps in the Heinonen's system. One would have been motivated to use such steps in order to increase the system security.

Claim 10: Heinonen and Baker disclose a method as recited in claim 9. Further, Heinonen also discloses wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 11: Heinonen and Baker disclose a method as recited in claim 10. Further, Heinonen also discloses wherein the messages are integrated with the Short Message Service (SMS) channel of the telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 12: Heinonen discloses a method of loading (Col. 1, lines 49-56) value over a telecommunications network onto a smart card (Col. 1, lines 28-42 and col. 2, lines 22-42), the method comprising: receiving at a mobile telephone handset with a subscriber identification module (Col. 1, line 57-col. 2, line 14) a request from a user to load a value into a stored-value application of the smart card inserted in the handset (Col. 1, lines 10-25 and col. 2, lines 50-55); opening a second application on the smart card capable of funding the stored value application (Col. 1, lines 42-45); generating a



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funds request message which includes the value and an authorization certificate (Col. 3, lines 61-64); sending the funds request message over said telecommunications network to a funds issuer computer arranged to authenticate said second application and to generate an authentication response certificate (Col. 8, lines 46-49); However, Heinonen does not explicitly disclose receiving a response message which includes the authentication response certificate; validating the authentication response certificate and loading the value onto the stored-value application of said smart card from the second application. Baker discloses smart card loading system [see claim 1] and receiving a response message which includes the authentication response certificate; validating the authentication response certificate (C4 L5-L20; C6 L11-L67; C8 L33-L46] and loading the value onto the stored-value application of said smart card from the second application [abs; Fig. 1; C1 L5-L37; C2 L62-67; C3 L22-L45; C4 L15-20]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to receiving (get) response message which includes the authentication response certificate; validating the authentication response certificate and loading the value onto the stored-value application of said smart card from the second application. One would have been motivated to use such steps in order to increase the system security and recharge the smart card.

Claim 13: Heinonen and Baker disclose a method as recited in claim 12 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 14: Heinonen and Baker discloses a method as recited in claim 13 wherein said messages are integrated with the Short Message Service (SMS) channel of said telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

**Claims 2-3, 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen and Baker as applied to claims 1, 5, 12 above, and further in view of Kashef et al (Hereinafter Kashef - PG PUB US 2002/0175207).**

Claim 2: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42), and telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36). However, Heinonen does not explicitly disclose smart card loading system. Kashef discloses smart card loading system [C8 para. 0080 & 0081]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include that step in the Heinonen's system. One would have been motivated to load (program, recharge or burn) the smart card with local stand-alone machine without making trip to authorized card center.

Claim 3: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42). However, Heinonen does not explicitly disclose smart card loading system as recited in claim 2 wherein the card reader is an Europay-Mastercard-Visa type card

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reader. Kashef discloses smart card loading system [Fig. 4; C8 para. 0080 & 0081] and wherein the card reader is an Europay-Mastercard-Visa type card reader [C3 para. 0038; C7 para.0075]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include that step in the Heinonen's system. One would have been motivated to use such steps in order to increase the use of the system.

Claim 8: Heinonen discloses smart card loading system as recited in claim 5. However Heinonen does not explicitly disclose wherein in response to a successful load, the handset is arranged to generate a transaction certificate to be used for irrepudiation. Kashef discloses smart card loading system [C8 para. 0080 & 0081] and wherein in response to a successful load, the handset is arranged to generate a transaction certificate to be used for irrepudiation (digital signature) [C6 para. 0064]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to generate a transaction certificate to be used for irrepudiation. One would have been motivated to use such step in order to prevent contention on the use of the system.

Claim 15: Heinonen discloses a method as recited in claim 12. However Heinonen does not explicitly disclose generating a transaction certificate to be used for irrepudiation. Kashef discloses smart card loading system [C8 para. 0080 & 0081] and generating a transaction certificate to be used for irrepudiation (digital signature) [C6

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para. 0064]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to generate a transaction certificate to be used for irrepudiation. One would have been motivated to use such step in order to prevent contention on the use of the system.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

i). US Pat 5,461,217 to Claus, October 24, 1995 "Secure money transfer techniques using smart cards". This invention discloses a systems and methods for providing secure electronic financial transactions where money is electronically stored on a plurality of smart cards and providing secure money transfers between smart cards and financial institutions.

ii). US Pat. 6,434,238 to Chaum et al, Aug. 13, 2002 "Multi-Purpose Transaction Card System". This invention discloses multi-purpose transaction card system comprising an issuer, one or more cards, terminals, cryptographic and authentication.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro R. Kanof whose telephone number is 703-308-9552.

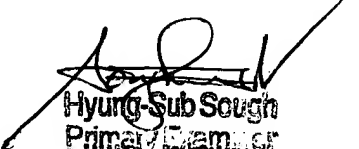
The examiner can normally be reached on M-F 7:30-4:00.

- a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Pedro R. Kanof  
Patent Examiner  
Art Unit 3628

PRK  
February 23, 2003

  
Hyung Sub Sough  
Primary Examiner